

What is claimed is:

1. A numerical expression retrieving device for retrieving a numerical expression in a natural language, comprising:

input means for inputting any document to-be-retrieved or any numerical expression to-be-retrieved;

syntactic parsing means for parsing a syntactic structure of the inputted document or numerical expression;

an attribute dictionary which stores attribute information and unit system information therein, the attribute information including attribute names indicative of attributes, attribute contents indicative of meanings of the attributes, and basic units for supplementing omitted representations, the unit system information including prefixes for deciding omissions, and multiples indicative of meanings of the prefixes;

a co-occurrence word dictionary which stores therein information including attribute names indicative of attributes, and co-occurrence words for deciding the attribute names; and

omission completion means for supplementing a basic unit to a prefix of the inputted document or numerical expression by referring to the parsed syntactic structure and said attribute dictionary, or by further referring to said co-occurrence word dictionary, thereby to complete the

incomplete numerical expression.

2. A numerical expression retrieving device according to claim 1, further comprising:

extraction means for extracting a word with the basic unit supplemented to the prefix, as a retrieval keyword from the document after the completion;

a document database which stores document data therein; and

document storage and retrieval means for storing the completed document, the inputted original document, and the extracted retrieval keyword in the document database;

wherein said omission completion means searches for a numerical expression shortened to a prefix only, from within the inputted document by referring to the parsed syntactic structure and said co-occurrence word dictionary, determines a co-occurrence word of the prefix on the basis of the parsed syntactic structure for the shortened numerical expression, determines an attribute name of the prefix by referring to said co-occurrence word dictionary on the basis of the determined co-occurrence word, and supplements the basic unit to the prefix by referring to said attribute dictionary on the basis of the determined attribute name.

3. A numerical expression retrieving device according to claim 2, further comprising:

output means;

wherein said omission completion means decides whether or not the inputted numerical expression is a numerical expression shortened to a prefix only, by referring to the parsed syntactic structure and said co-occurrence word dictionary, and in case of the numerical expression shortened to the prefix only, it notifies a user to that effect by said output means and thereby prompts him/her to re-input a numerical expression.

4. A numerical expression retrieving device according to claim 2, further comprising:

output means;

wherein said omission completion means decides whether or not the inputted numerical expression is a numerical expression shortened to a prefix only, by referring to the parsed syntactic structure and said co-occurrence word dictionary, and in case of the numerical expression shortened to the prefix only, it presents basic units and attribute information by said output means and thereby prompts a user to select one of the basic units, and it completes the shortened numerical expression with the selected basic unit.

5. A numerical expression retrieving device according to claim 4, wherein when the basic unit for completing the shortened numerical expression has not been selected, said omission completion means completes the shortened numerical expression with all basic units which can be supplemented.

6. A numerical expression retrieving device according to claim 3, wherein said document storage and retrieval means retrieves a document whose retrieval keyword agrees with the inputted numerical expression, from said document database, and it outputs the document as a retrieved result by said output means.